

**Dr Robert Sunderland MD FRCP FRCPCH FMFFLM**  
**Consultant Paediatrician**

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**MEDICAL REPORT**

**Patient:** Isis Vas  
**Date of Birth:** 26<sup>th</sup> April 2000  
**Died:** 29<sup>th</sup> October 2000  
**Requested by:** Heather Kirkwood  
Attorney At Law  
4515 West Dravus Street  
Seattle  
WA 98199  
USA  
**Our Reference:** RS/sjf  
**Date Report Requested:** 9<sup>th</sup> June 2006  
**Date Report Typed:** 1<sup>st</sup> July 2006

1.0 This report has been prepared pro bono. No charge is made of the report and no charge can be made for the use of this report without the author's consent.

2.0 Requested by Heather Kirkwood on 20<sup>th</sup> May 2006.

3.0 The report is based on review of the following documents:

Hospital records re Isis Vas of Northwest Texas Health Care System for 28-29<sup>th</sup> October 2000  
Autopsy report on Isis Vas 31<sup>st</sup> October 2000  
Office records of Dr. C. Werner, pediatrician  
Transcript of 911 call 10.55am 28<sup>th</sup> October 2000  
Summary of medical history dated 18<sup>th</sup> January 2006  
Draft summary of facts in Lopez Habeas Petition dated April 2006

4.0 To my knowledge I have not met or examined any of the participants in this action and have seen none of the images referred to in various papers.

5.0 From the information available to me this case concerns an alleged sexual assault followed by a fatal shaken brain injury; the medical opinions were that the assault had taken a healthy child to a moribund state shortly before the ambulance was called.

6.0 The laboratory reports timed 11.57-12.10 on 28<sup>th</sup> October 2000 show a child with a seriously deranged chemistry. There was a metabolic acidosis (pH 6.89), elevated glucose (385mg/dl), deranged liver function (albumin 2.5g/dl, AST 215u/l, ALT 106u/l, alk phos 169u/l), serious deranged coagulation (PT 20.4s, PTT >212s, INR 1.64, fibrinogen 94mg/dl and anaemia (Hb 8.7g/dl, MCV 88.5fl). The anaemia is consistent with haemorrhage rather than an iron deficient diet. The extremely high glucose may be a stress response, or related to the site of venepuncture but I cannot exclude the onset of diabetes mellitus. The low protein, high transaminases and deranged coagulation may all be a consequence of liver disease. I am not aware of these markedly abnormal results previously being seen in a child who was allegedly normal two hours before these samples were taken. It is my understanding that such deranged liver function requires a serious illness of days or weeks.

7.0 There is a history given of black motions which I interpret to be melaena that was first reported by the Lopez's on the evening of 25<sup>th</sup> October 2000. I understand that Isis was taken to the Lopez's about 16.30 on Wednesday 25<sup>th</sup> October 2000. Such melaena could account for the low blood protein; the melaena is a probable consequence of preceding deranged coagulation but could follow a blow to the abdomen.

8.0 The medical records that I have seen do not discuss this abnormal chemistry and coagulation.

This child was dehydrated on arrival at hospital as shown in the blood tests (Na 140 mmol/l, BUN 12.0 mg/dl, creatinine 0.6 mg/dl, BUN/creat ratio: 20.0, plasma osmolality 296 mOsm/kg ). The Lopez accounts describe a child who was too unwell to feed and had become anuric. Over-concentrated feeds would result in dehydration and feeds inappropriate for age may aggravate this.

9.0 I understand that Isis' liver was donated to another child. On the basis of this chemistry, there must be concerns that Isis' liver was damaged or diseased and may have been unsuitable for transplant.

10.0 Medical records note in detail bruises on the child's face, chest, upper arms, groins and left leg. I understand that the Lopez's noted these marks on the face when Isis was brought to them on 25<sup>th</sup> October 2000. I understand that mother alleged there were no bruises present when she left to spend the weekend in Michigan on Friday 28<sup>th</sup> October 2000 but subsequently stated that Isis may have had a number of insect bites to her face on Monday 23<sup>rd</sup> October 2000. This would raise the possibility of assault prior to going to the Lopez home or post-bite "staining" that can be mistaken for bruising. Given the deranged coagulation in this child, one should interpret any skin bruising or bowel bleeding with extreme caution.

11.0 Dating bruises from their appearance is an imprecise art that can mislead. As a general rule bruises are initially red/purple becoming yellow at around 18-24 hours and fading through blue/green to brown over 10-14 days. I note the clinical records describe many of the bruises as brown yet the autopsy report describes many of them as blue (which could have arisen in hospital and were probably a consequence of her deranged coagulation).

- 12.0 When attempting to catheterize Isis' bladder in hospital a 1cm bleeding tear was noted at the fourchette. This raised concerns of blunt sexual trauma to the external genitalia. I have seen splitting of this friable damp tissue in sick infants during medical examination. The fresh bleeding would indicate a very recent injury, an injury some two hours earlier would be expected to have clotted. The medical records have not photocopied clearly but I cannot see any reference to the hymen or any record of trauma to the vagina which would be expected in a penetrative sexual assault. Given the seriously deranged blood clotting one would expect there to have been extensive haemorrhage had such an assault occurred.
- 13.0 The subdural haemorrhage is consistent with a shaking or impact to the back of the head. I understand that Isis was found on the floor beside a couch and may have hit her head on the corner of a car seat at around 3.00am on Friday 28<sup>th</sup> October 2000. The causation of subdural haemorrhage is somewhat contentious but there are witnessed cases of backward falls followed by subdural haemorrhage and this would be an acceptable explanation for the subsequent events in a child with deranged coagulation.
- 14.0 I understand that there were concerns about Dr. Vas parenting skills, domestic organization, mental health and life style. I have concerns about the inconsistent histories reportedly given by mother. I understand that the Lopez home is described as immaculate, that there were no injuries to other children in the Lopez home and psychological assessment deemed Mr. Lopez to be normal.
- 15.0 From the information available, Isis was ill before 25<sup>th</sup> October 2000 when she was taken to the Lopez home. She was reported to be lethargic, anorexic, febrile and passing black motions. The marks to her face that could be resolving insect bites or finger-tip/knuckle marks from injury sustained before 25<sup>th</sup> October 2000. I am not expert in tropical medicine, for completeness I wonder whether the child's deranged coagulation may have been caused by venom from an insect bite that then led on to easy bruising, bowel and brain haemorrhage with dehydration and ultimately irreversible brain damage.
- 16.0 While the underlying cause for this child's illness is unclear, the chemistry reports indicate a child who had been ill for some days prior to collapse. The deranged liver function and coagulation are consistent with a history given by the Lopez family of a child who was ill when she arrived at their home. The abnormality of liver function shown in the blood tests could be secondary to neglect of a childhood infection, inappropriate diet, assault (some days earlier), some insect toxin/venom, or some other cause. I think these causes are more likely on these blood tests than a primary hepatic illness. The metabolic acidosis and hyperglycaemia are, in my opinion, terminal events.
- 17.0 I cannot exclude an assault sometime before her final collapse but these chemistry results are not consistent with a healthy child some two hours before the blood was taken.

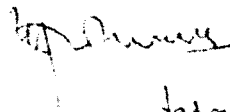
**18.0 STATEMENT OF TRUTH:**

I understand that in the preparation of this report my duty is to the Court on matters within my expertise. I have complied with that duty. I believe that the facts that I have stated in this report are true and the opinions I have expressed are correct. I confirm that in so far as the facts stated in my report are within my own knowledge I have made clear which they are and I believe them to be true. The opinions I have expressed represent my professional opinion.

**Dr Robert Sunderland**  
**Consultant Paediatrician MD FRCP FRCPCH**

Date signed:

Subscribed to and sworn to before me this 26 day of July 2006.

  
Andrew Martin Breckwell  
Solicitor  
Partner  
Mills & Reeve  
78-84 Colmore Row  
Birmingham.